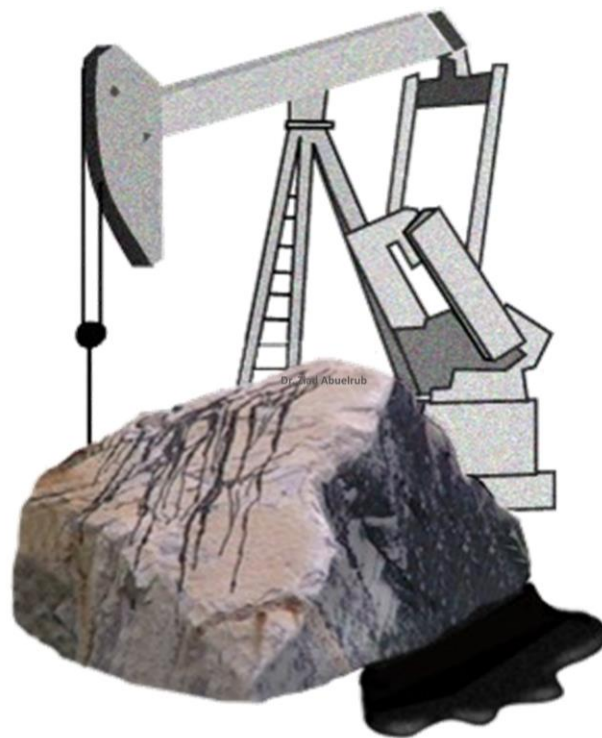


# Workshop

## Processing and Utilization of Oil Shale



**5 November 2014**

**4:30 pm - 8.00 pm**

**Rum 2, Landmark Hotel, Amman - Jordan**

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Workshop Title	Processing and Utilization of Oil Shale
Date	5 Nov. 2014
Time	4.30 pm – 8.00 pm
Location	Landmark Hotel, Amman
Organized by	Dr. Ziad Abu El-Rub
Introduction	<p>Jordan's economy is suffering from crippling energy crisis as it imports about 97% of its energy needs, which constitutes about 21% of the country's GDP (2013). This has led to a comprehensive national energy strategy to diversify the country's sources of energy. Accordingly, the 2020 strategy of the Jordanian Ministry of Energy aims to achieve 10% based on renewable energy sources, e.g. solar and wind, and another 10% based on alternative energy sources, which is the oil shale.</p> <p>Jordan is one of the richest countries in the world in oil shale (forth). It owns about 70 billion tons dispersed across 65% of the area of Jordan. As the price of the barrel of crude oil has exceeded \$ 100 mark, the production of oil shale becomes economically viable as the production cost is about 40-50 dollars per barrel of oil shale. On the other hand, the technical side is the second hurdle due to the limited international experience and the few successful experiments like those of Estonia, Brazil and China</p> <p>During the next few years, Jordan will witness a set of large-scale projects to take advantage of oil shale as a viable energy source. That is where the government has signed agreements with a number of major global companies to implement these projects. There will be projects to generate electricity by direct combustion of oil shale. In addition, there will be multiple projects to produce shale oil by a number of surface technologies besides Shell in-situ technology.</p> <p>The huge oil shale projects will be accompanied by substantial environmental challenges to both the executing companies and the government surveillance.</p>
Objectives	<ol style="list-style-type: none"> <li>1- Give an overview on the importance of oil shale as an alternative energy source in Jordan</li> <li>2- Give an overview on the multiple surface oil shale production technologies and Shell in-situ production technology</li> <li>3- Stimulate the chemical engineering departments in Jordan to take an active role in the success of these projects through supportive research and graduating capable chemical engineers to be part of these projects</li> </ol>

<b>Outline</b>	<ol style="list-style-type: none"> <li>1- Overview on oil shale in Jordan: national strategy, oil shale properties and resources</li> <li>2- Oil shale production technologies: surface and in-situ</li> <li>3- Environmental aspects of oil shale industry</li> <li>4- Discussion and recommendations</li> </ol>
<b>Who should attend</b>	The workshop should be of interest to industry, government, non-governmental organization and academic attendees at the JICHE07 with familiarity or interest in oil shale.
<b>Format</b>	The workshop will be conducted through presentations, panel discussions and open discussions
<b>Outcome</b>	The outcome of the workshop, to be produced after the workshop is complete, will be an integrated summary with recommendations
<b>Fees</b>	<p>The registration fee includes program materials and refreshments at breaks. Participants in the JICHE07 conference can participate in this workshop for free.</p> <p>Workshop Fees : 100 JD</p>
<b>Certificates</b>	Certificates of attendance will be given to participants of the workshop
<b>Contact</b>	<p><a href="http://www.jeaconf.org/jiche">www.jeaconf.org/jiche</a>  Email : <a href="mailto:jiche@jea.org.jo">jiche@jea.org.jo</a>  TEL: +962 6 5000900 ,Ext 192  FAX: +962 6 5676933  P.O. Box: 940188  (11194) Amman, JORDAN</p>



## **Workshop Agenda Processing and Utilization of Oil Shale**

7<sup>th</sup> Jordan International Chemical Engineering (JICHE07) Conference  
Organized by: Dr. Ziad Abu El-Rub  
November 5, 2014  
Rum 2, Landmark Hotel, Amman, Jordan

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|-----------------------|---|
| <b>4:30 – 5:00 pm</b> | <b>Oil Shale - Jordanian Perspective</b><br><b>Dr. Ziad Abuelrub</b><br>Department of Pharmaceutical and Chemical Engineering,<br>German Jordanian University, Jordan |
| <b>5:00-5:30 pm</b>   | <b>Operational Oil Shale Technologies</b><br><b>Prof. Omar Al-Ayed</b><br>Department of Chemical Engineering, Al-Balqa Applied University,<br>Jordan                  |
| <b>5:30-6:00 pm</b>   | <b>FMG-ATP Plant in China, commissioning and operation</b><br><b>Prof. Jim Schmidt</b><br>Managing Director, PROCOM Consultants, Australia                            |
| <b>6:00-6:20 pm</b>   | <b>COFFEE BREAK</b>   |
| <b>6:20-6:50 pm</b>   | <b>Shell ICP Technology</b><br><b>Mr. Wasfi Al Omari,</b><br>Sr. Geologist, JOSCO, Jordan   |
| <b>6:50-7:20 pm</b>   | <b>Environmental Challenges of Oil Shale Industry</b><br><b>Eng. Munther Bsieso</b><br>Technical Manager, Sultani International Oil Company, Jordan                   |
| <b>7:20-8:00 pm</b>   | <b>OPEN DISCUSSION AND CLOSING</b>  |